



# 5

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<110> Novozymes A/S

Jorgensen, Steen T

Rasmussen, Michael D

Andersen, Jens Tonne

Olsen, Carsten

<120> Multiple Insertion of Genes

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<140> 09/928847

<141> 2001-08-13

<160> 50

<170> PatentIn version 3.1

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cca ttc tat aga aag aca tgg gcc gaa atc gat tta acg gct tta aaa						1362
Pro Phe Tyr Arg Lys Thr Trp Ala Glu Ile Asp Leu Thr Ala Leu Lys						
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gaa aac gtc cgc aat atg aag cg	g	cac atc ggc gag cat gtc cgc ctg				1410

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Ala Lys Ala Ala Leu Ala Glu Gly Ala Ser Ile Leu Ala Val Ala Leu		
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ttg gat gaa gcg ctt tcg ctg agg gcg cag ggg att gaa gaa ccg att		1554
Leu Asp Glu Ala Leu Ser Leu Arg Ala Gln Gly Ile Glu Glu Pro Ile		
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ctt gtc ctc ggt gca gtg ccg acc gaa tat gca agc att gcc gct gaa		1602
Leu Val Leu Gly Ala Val Pro Thr Glu Tyr Ala Ser Ile Ala Ala Glu		
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aag cgc att atc gtg act ggc tac tcc gtc ggc tgg ctg aaa gac gtg		1650
Lys Arg Ile Ile Val Thr Gly Tyr Ser Val Gly Trp Leu Lys Asp Val		
105	110	115
ctc ggt ttt ctg aat gag gcc gaa gct cct ctt gaa tat cat ttg aag		1698
Leu Gly Phe Leu Asn Glu Ala Glu Ala Pro Leu Glu Tyr His Leu Lys		
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atc gac acg ggc atg ggc cgc ctt ggc tgc aaa acg gaa gaa gag atc		1746
Ile Asp Thr Gly Met Gly Arg Leu Gly Cys Lys Thr Glu Glu Glu Ile		
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Lys Glu Met Met Glu Met Thr Glu Ser Asn Asp Lys Leu Asn Cys Thr		
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Gly Val Phe Thr His Phe Ala Thr Ala Asp Glu Lys Asp Thr Asp Tyr		
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ttc aac atg cat ctt gac cgc ttt aaa gag ctg atc agc ccc ttc ccg		1890
Phe Asn Met His Leu Asp Arg Phe Lys Glu Leu Ile Ser Pro Phe Pro		
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Phe Arg Glu Gln Leu Phe Asn Ala Val Arg Phe Gly Ile Gly Met Tyr		
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Gly Leu Ala Pro Ser Thr Glu Ile Lys Asp Glu Leu Pro Phe Arg Leu		
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Arg Glu Val Phe Ser Leu His Thr Glu Leu Thr His Val Lys Lys Ile		
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Lys Lys Gly Glu Ser Val Ser Tyr Gly Ala Thr Tyr Thr Ala Gln Arg		
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Asp Glu Trp Ile Gly Thr Val Pro Val Gly Tyr Ala Asp Gly Trp Leu		
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Ile Ala Gly Arg Ile Cys Met Asp Gln Phe Met Ile Ser Leu Ala Glu		
310 315 320		
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Tyr Glu Ile Thr Cys Met Ile Ser Ser Arg Val Pro Arg Met Phe Leu		
360 365 370		
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<223> n denotes an undetermined nucleotide

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His Val Arg Leu Met Ala Val Val Lys Ala Asn Ala Tyr Gly His Gly  
35 40 45

Asp Ala Gln Val Ala Lys Ala Ala Leu Ala Glu Gly Ala Ser Ile Leu  
50 55 60

Ala Val Ala Leu Leu Asp Glu Ala Leu Ser Leu Arg Ala Gln Gly Ile  
65 70 75 80

Glu Glu Pro Ile Leu Val Leu Gly Ala Val Pro Thr Glu Tyr Ala Ser  
85 90 95

Ile Ala Ala Glu Lys Arg Ile Ile Val Thr Gly Tyr Ser Val Gly Trp  
100 105 110

Leu Lys Asp Val Leu Gly Phe Leu Asn Glu Ala Glu Ala Pro Leu Glu  
115 120 125

Tyr His Leu Lys Ile Asp Thr Gly Met Gly Arg Leu Gly Cys Lys Thr  
130 135 140

Glu Glu Glu Ile Lys Glu Met Met Glu Met Thr Glu Ser Asn Asp Lys  
145 150 155 160

Leu Asn Cys Thr Gly Val Phe Thr His Phe Ala Thr Ala Asp Glu Lys  
165 170 175

Asp Thr Asp Tyr Phe Asn Met His Leu Asp Arg Phe Lys Glu Leu Ile  
180 185 190

Ser Pro Phe Pro Leu Asp Arg Leu Met Val His Ser Ser Asn Ser Ala  
195 200 205

Ala Gly Leu Arg Phe Arg Glu Gln Leu Phe Asn Ala Val Arg Phe Gly  
210 215 220

Ile Gly Met Tyr Gly Leu Ala Pro Ser Thr Glu Ile Lys Asp Glu Leu  
225 230 235 240

Pro Phe Arg Leu Arg Glu Val Phe Ser Leu His Thr Glu Leu Thr His  
245 250 255

Val Lys Lys Ile Lys Lys Gly Glu Ser Val Ser Tyr Gly Ala Thr Tyr  
260 265 270

Thr Ala Gln Arg Asp Glu Trp Ile Gly Thr Val Pro Val Gly Tyr Ala  
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Asp Gly Trp Leu Arg Arg Leu Ala Gly Thr Glu Val Leu Ile Asp Gly  
290 295 300

Lys Arg Gln Lys Ile Ala Gly Arg Ile Cys Met Asp Gln Phe Met Ile  
305 310 315 320

Ser Leu Ala Glu Glu Tyr Pro Val Gly Thr Lys Val Thr Leu Ile Gly  
325 330 335

Lys Gln Lys Asp Glu Trp Ile Ser Val Asp Glu Ile Ala Gln Asn Leu  
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Gln Thr Ile Asn Tyr Glu Ile Thr Cys Met Ile Ser Ser Arg Val Pro  
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